



UNITED STATES DEPARTMENT OF COMMERCE

	States Patent and Trademark Office
Address:	COMMISSIONER FOR PATENTS
	P.O. Box 1450
	Alexandria, Virginia 22313-1450
	Alexandra, Virginia 22515-1450

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.	
09/973,678	10/05/2001	Scott S. Lawton	CTK-007.01 (21910-701)	5769	
75	590 03/01/2004		EXAMI	NER	
Scott Lawton			CHEN, CHO	CHEN, CHONGSHAN	
Catchmaker 24 Colonial Dri	ive		ART UNIT	PAPER NUMBER	
Chelmsford, M	IA 01824		2172		
			DATE MAILED: 03/01/2004	4	

Please find below and/or attached an Office communication concerning this application or proceeding.

	Application No.	Applicant(s)				
	09/973,678	LAWTON, SCOTT S.				
Office Action Summary	Examiner	Art Unit				
	Chongshan Chen	2172				
The MAILING DATE of this communication app Period for Reply	ears on the cov r sheet with	h the correspondence addr ss				
A SHORTENED STATUTORY PERIOD FOR REPLY THE MAILING DATE OF THIS COMMUNICATION.  - Extensions of time may be available under the provisions of 37 CFR 1.13 after SIX (6) MONTHS from the mailing date of this communication.  - If the period for reply specified above is less than thirty (30) days, a reply If NO period for reply is specified above, the maximum statutory period w  - Failure to reply within the set or extended period for reply will, by statute, Any reply received by the Office later than three months after the mailing earned patent term adjustment. See 37 CFR 1.704(b).	36(a). In no event, however, may a re within the statutory minimum of thirty will apply and will expire SIX (6) MONT cause the application to become ABA	ply be timely filed  (30) days will be considered timely.  THS from the mailing date of this communication.  ANDONED (35 U.S.C. § 133).				
Status						
1) Responsive to communication(s) filed on	<u>_</u> .					
2a) ☐ This action is <b>FINAL</b> . 2b) ☒ This						
3) Since this application is in condition for allowar	nce except for formal matte	ers, prosecution as to the merits is				
closed in accordance with the practice under E	Ex parte Quayle, 1935 C.D.	11, 453 O.G. 213.				
Disposition of Claims						
4) Claim(s) 1-28 is/are pending in the application.						
4a) Of the above claim(s) is/are withdraw	wn from consideration.					
5) Claim(s) is/are allowed.	5) Claim(s) is/are allowed.					
6)⊠ Claim(s) <u>1-28</u> is/are rejected.						
7) Claim(s) is/are objected to.						
8) Claim(s) are subject to restriction and/o	r election requirement.					
Application Papers						
9)☐ The specification is objected to by the Examine	er.					
,	10) ☐ The drawing(s) filed on is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.					
Applicant may not request that any objection to the	• • • • • • • • • • • • • • • • • • • •	· ·				
Replacement drawing sheet(s) including the correct 11) The oath or declaration is objected to by the Ex	,					
Priority under 35 U.S.C. § 119						
12) Acknowledgment is made of a claim for foreign a) All b) Some * c) None of:  1. Certified copies of the priority document 2. Certified copies of the priority document 3. Copies of the certified copies of the priority document application from the International Bureau * See the attached detailed Office action for a list	s have been received. s have been received in Aprity documents have been u (PCT Rule 17.2(a)).	pplication No received in this National Stage				
Attachment(s)						
1) Notice of References Cited (PTO-892)		ummary (PTO-413)				
Notice of Draftsperson's Patent Drawing Review (PTO-948)     Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)     Paper No(s)/Mail Date	Paper No(s	)/Mail Date formal Patent Application (PTO-152)				
S. Patent and Trademark Office						

Ţ

Art Unit: 2172

#### **DETAILED ACTION**

Page 2

1. Claims 1-28 are pending in this Office Action.

## Claim Objections

- 2. Claims 1-28 are objected to because of the following informalities: inappropriately using bullets in the claims. Appropriate correction is required.
- 3. Claims 1, 5, 7, 9, 14, 15, 17, 19-22 and 28 are object to because of the following informalities: inappropriately use the term "and/or" in the claim language. It is unclear to the examiner whether the applicant means "and" or "or", therefore, the examiner interprets the applicant means "or" for the term "and/or".
- 4. Claims 1, 3, 12, 25 and 28 are object to because of the following informalities: inappropriately use the term "zero or more" in the claim language. It is unclear to the examiner whether the applicant means "zero" or "more", therefore, the examiner interprets the applicant means zero for the term "zero or more".
- 5. Claims 3 and 12 are objected to because of the following informalities: inappropriately use the term "if any" in the claim language. It is unclear to the examiner what the applicant means "if any". Appropriate correction is required.
- 6. Claim 3 is object to because of the following informalities: misspelling "identifers" in the second line of the first limitation in claim 3. Appropriate correction is required. Correction for other misspelling in other claims is required.
- 7. Claim 25 is objected to because of the following informalities: it is unclear what is VDU in the last limitation of the claim. Appropriate correction is required.

٨.

Art Unit: 2172

## Claim Rejections - 35 USC § 112

Page 3

8. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

- 9. Claims 1-28 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.
- 10. Claim 1 recites the limitation "the primary sort order" in the 2<sup>nd</sup> to the last line in claim 1. There is insufficient antecedent basis for this limitation in the claim. Correction for other lack of antecedent basis in the claims is required.
- 11. The independent claims 24 and 25 recites the limitation "an ACFS as recited in claim 1" is inappropriate.

## Claim Rejections - 35 USC § 103

- 12. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
  - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 13. Claims 1-6 are rejected under 35 U.S.C. 103(a) as being unpatentable over AddressPro (AddressPro v4.0 (c) Copyright January 2000 by ZingWare).

As per claim 1, AddressPro teaches an Adaptive Criteria Filtering System (ACFS) that assembles sort criteria for an Information Sorting Mechanism (ISM), the ACFS comprising:

receive the instruction list (AddressPro, 6.2, Changing the display and sort order of the address list, the user enters sort instructions),

receive the secondary sort criteria (AddressPro, 6.2, Changing the display and sort order of the address list, secondary sort field),

create the adapted list by merging the instruction list with relevant portions of the secondary sort criteria which may include the entire secondary sort criteria (AddressPro, 6.2, Changing the display and sort order of the address list, "the secondary sort field is used to sort the list if the records has the same data in the main sort field". Clearly, the sorting method merges the secondary sort field with the main sort field), and

send the adapted list to the output port (AddressPro, 6.2, Changing the display and sort order of the address list, display);

whereby the ACFS adapts secondary sort criteria to user-specified sort criteria, giving the user control over the primary sort order while retaining the benefit of the secondary sort criteria (AddressPro, 6.2, Changing the display and sort order of the address-list, "the secondary sort field is used to sort the list if the records has the same data in the main sort field").

AddressPro does not explicitly disclose an instruction port, a secondary port and an output port. However, a port is an interface through which data is transferred between a computer and other devices (such as a printer, mouse, keyboard, or monitor), a network, or a direct connection to another computer (Microsoft Computer Dictionary). It is obvious the AddressPro includes all the ports so that the sort/display system can receive sort instructions from the user, sort and display the address list. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to include an instruction port, a

Art Unit: 2172

secondary port and an output port in the system of AddressPro so that the sort/display system can receive sort instructions from the user, sort and display the address list.

As per claim 2, AddressPro teaches all the claimed subject matters as discussed in claim 1, and further teaches the secondary sort criteria includes a default list having at least one data element identifier; and the filter assembles the adapted list consisting of the contents of the instruction list followed by each of the identifiers from the default list that are not in the instruction list (AddressPro, 6.2, Changing the display and sort order of the address list).

As per claim 3, AddressPro teaches all the claimed subject matters as discussed in claim 1, and further teaches the secondary sort criteria includes a list having at least one primary data element identifier and an associated list of zero or more implied data element identifiers for each primary data element identifier; and the filter assembles the adapted list by starting with an empty adapted list, iterating through the instruction list, and, for each item in the instruction list adding, without regard to order, one or both of the item itself and the implied data element identifiers, if any, that is associated with the item (AddressPro, 6.2, Changing the display and sort order of the address list).

As per claim 4, AddressPro teaches all the claimed subject matters as discussed in claim 3, and further teaches the filter first adds the implied data element identifiers and then adds the item (AddressPro, 1. Overview, 6.2, Changing the display and sort order of the address list).

As per claim 5, AddressPro teach all the claimed subject matters as discussed in claim 4 except for explicitly disclosing the implied data includes at least one of the following: City IMPLIES Area Code; City IMPLIES State; City IMPLIES Province; City IMPLIES Country, State; City IMPLIES Country, Province; State IMPLIES Country; Company Name IMPLIES

Art Unit: 2172

IsRecruitingAgency; and/or Job Title IMPLIES IsContractPosition. However, the database in AddressPro includes city and phone number which includes area code. It is obvious the city information implies area code so that the information can identify which state the city is in.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have implied data in order to identify which state the city is in.

As per claim 6, AddressPro teaches all the claimed subject matters as discussed in claim 3, and further teaches the filter first adds the item and then adds the implied data element identifers (AddressPro, 1. Overview, 6.2, Changing the display and sort order of the address list).

Claim 7 is rejected on grounds corresponding to the reasons given above for claim 5.

As per claim 8, AddressPro teaches all the claimed subject matters as discussed in claim 3, and further teaches the filter adds the implied data element identifiers and does not add the item (AddressPro, 1. Overview, 6.2, Changing the display and sort order of the address list).

Claim 9 is rejected on grounds corresponding to the reasons given above for claim 5.

As per claim 10, AddressPro teaches all the claimed subject matters as discussed in claim 3, and further teaches the filter does not add any specific data element identifier to the adapted list if the adapted list already contains the identifier (AddressPro, 1. Overview, 6.2, Changing the display and sort order of the address list).

As per claim 11, AddressPro teaches all the claimed subject matters as discussed in claim 3, and further teaches the filter adds every implied data element identifier that is implied by any implied data element identifier (AddressPro, 1. Overview, 6.2, Changing the display and sort order of the address list).

As per claim 12, AddressPro teaches all the claimed subject matters as discussed in claim 1, and further teaches the secondary sort criteria includes a list having at least one default data element identifier and a list having at least one primary data element identifier and an associated list of zero or more implied data element identifers for each primary data element identifier; and the filter assembles the adapted list by starting with an empty adapted list and: iterating through the instruction list, and, for each item in the instruction list adding to the adapted list, without regard to order, one or both of the item itself and the implied data element identifiers, if any, that is associated with the item; and iterating through the default list, and, for each item not in the adapted list, adding to the adapted list, without regard to order, one or both of the item itself and the implied data element identifiers, if any, that is associated with the item (AddressPro, 1. Overview, 6.2, Changing the display and sort order of the address list).

As per claim 13, AddressPro teaches all the claimed subject matters as discussed in claim 1, and further teaches a control port configured to receive an optional command; and wherein the filter reads the command from the control port, and, if the command indicates that the secondary sort criteria should not be used, the filter creates an adapted list identical to the instruction list (AddressPro, 1. Overview, 6.2, Changing the display and sort order of the address list).

As per claim 14, AddressPro teaches all the claimed subject matters as discussed in claim 1, and further teaches the ISM is comprised of a database, a database management system, a search engine supporting full-text search and sorting by data elements within the text, and/or a sorting library or code module (AddressPro, 1. Overview, 6.2, Changing the display and sort order of the address list, the examiner interprets the "and/or" as or).

Art Unit: 2172

As per claim 15, AddressPro teaches all the claimed subject matters as discussed in claim 1, and further teaches each data element is comprised of a database field, tagged data including HTML, XML, or SGML, meta data, and/or a document (AddressPro, 1. Overview, 6.2, Changing the display and sort order of the address list, the examiner interprets the "and/or" as or).

As per claim 16, AddressPro teaches all the claimed subject matters as discussed in claim 1, and further teaches the secondary port is comprised of static data stored in a storage means (AddressPro, 1. Overview, 6.2, Changing the display and sort order of the address list, the examiner interprets the "and/or" as or).

As per claim 17, AddressPro teaches all the claimed subject matters as discussed in claim 1, and further teaches the secondary port is configured to interact with code; and wherein the filter is configured to invoke the code in a procedural, object-oriented and/or other programmatic fashion (AddressPro, 1. Overview, 6.2, Changing the display and sort order of the address list, the examiner interprets the "and/or" as or).

As per claim 18, AddressPro teaches all the claimed subject matters as discussed in claim 1, and further teaches the instruction port is coupled to an HTTP Web server, or coupled to a computer-readable media, or configured to communicate via a standard electronic messaging protocol (AddressPro, 1. Overview, 6.2, Changing the display and sort order of the address list, the examiner interprets the "and/or" as or).

As per claim 19, AddressPro teaches all the claimed subject matters as discussed in claim 1, and further teaches the output port is configured to interact with code; and wherein the filter is configured to invoke the ISM in a procedural, object-oriented and/or other programmatic fashion

Art Unit: 2172

(AddressPro, 1. Overview, 6.2, Changing the display and sort order of the address list, the examiner interprets the "and/or" as or).

As per claim 20, AddressPro teaches all the claimed subject matters as discussed in claim 1, and further teaches the ACFS is implemented as a script embedded in, and/or linked to, a document employing a markup language including HTML, XML or SGML (AddressPro, 1. Overview, 6.2, Changing the display and sort order of the address list, the examiner interprets the "and/or" as or).

As per claim 21, AddressPro teaches all the claimed subject matters as discussed in claim 1, and further teaches the ACFS is implemented as a desktop, clientserver, and/or n-tier application (AddressPro, 1. Overview, 6.2, Changing the display and sort order of the address list, the examiner interprets the "and/or" as or).

As per claim 22, AddressPro teaches all the claimed subject matters as discussed in claim 1, and further teaches the filter is further configured to translate the adaptive list to the syntax and/or the format of the target ISM (AddressPro, 1. Overview, 6.2, Changing the display and sort order of the address list, the examiner interprets the "and/or" as or).

As per claim 23, AddressPro teaches all the claimed subject matters as discussed in claim 1, and further teaches each data element is part of a data object, the data object having at least one data unit of employment information (AddressPro, 1. Overview, 6.2, Changing the display and sort order of the address list, the examiner interprets the "and/or" as or).

As per claim 24, AddressPro teaches a sort system comprising: an ACFS as recited in claim 1; and an ISM coupled to the ACFS, to a data producer, and to a data consumer, the ISM being configured to receive the sort criteria in a predetermined syntax, receive the data from the

Art Unit: 2172

data producer, sort the data according to the sort criteria, and forward the sorted data to the data producer (AddressPro, 1. Overview, 6.2, Changing the display and sort order of the address list, the examiner interprets the "and/or" as or).

As per claim 25, AddressPro teaches a search system comprising:

an ACFS as recited in claim 1 (see rejection for claim 1);

a search port configured to receive search criteria (AddressPro, 1. Overview, 6.2, Changing the display and sort order of the address list, search);

an Information Location Mechanism (ILM) configured to locate zero or more data objects that match the received search criteria (AddressPro, 1. Overview, 6.2, Changing the display and sort order of the address list, search);

an ISM being configured to receive the sort criteria in a predetermined syntax, receive a plurality of data objects from the ILM, sort the data according to the sort criteria, and forward the sorted data objects to the IFM (AddressPro, 1. Overview, 6.2, Changing the display and sort order of the address list, sort); and

a client process and VDU to display the formatted data objects (AddressPro, 1. Overview, 6.2, Changing the display and sort order of the address list, display).

AddressPro does not explicitly disclose an Information Formatting Mechanism (IFM configured to format data. However, AddressPro disclose a database stores address information. The information in a database has certain format, it is formatted. Therefore, it is obvious the AddressPro includes an information formatting mechanism.

As per claim 26, AddressPro teaches all the claimed subject matters as discussed in claim 25, except for explicitly disclosing the data formatting employs a markup language including

HTML, XML or SGML. However, it would have been obvious to one of ordinary skill in the art at the time the invention was made to format date employing HTML, XML or SGML in order to provide data using web technology.

As per claim 27, AddressPro teaches all the claimed subject matters as discussed in claim 25, and further teaches the contents of at least one data element of at least one data object contains employment information (AddressPro, 1. Overview, 6.2, Changing the display and sort order of the address list, display).

Claim 28 is rejected on grounds corresponding to the reasons given above for claim 1.

#### Conclusion

14. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Ortega et al. (6,401,084) disclose merging query lists (col. 8, line 66 – col. 9, line 10).

# **Contact Information**

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Chongshan Chen whose telephone number is 703-305-8319. The examiner can normally be reached on Monday - Friday (8:00 am - 4:30 pm).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John E Breene can be reached on (703)305-9790. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Art Unit: 2172

Page 12

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

February 20, 2004

SHAHID ALAM PRIMARY EXAMINER